

Article

Epistemology as Education: Know Thyself

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Abstract: In his Introduction to this Special Edition of *Education Sciences*, Andrew Stables points out that often, epistemological questions in education have been pursued in isolation from ethics and other social concerns. In part, this problem has been addressed by ‘local’ epistemologies—feminist, queer, post-colonial, postmodern and others—which try to establish how different knowledge can look when not grounded in presuppositions of consciousness, or rationality, or gender, colour, etc., all of which exclude and suppress that which they deem to be ‘other’. However, perhaps it is not just these local knowledges that are excluded from epistemological work in education. Perhaps, remarkably, epistemological questions pursued in education are habitually carried out in isolation from education, as if education were nothing in its own right. This ‘otherness’ of education to philosophy in general, and to epistemology in particular, contributes to the latter often seeming to be nugatory with regard to the inequalities borne within modern social and political relations. With this in mind, the following contribution reflects not so much on the relation of epistemology and education, or on epistemology in education, but rather on epistemology as education. Primarily this concerns the question of how epistemology, the science of knowledge, can have knowledge of itself and of the educational significance carried in trying to do so. This challenge of epistemology as education commends epistemology to heed the Delphic maxim: know thyself. It is to these efforts that the following essay is directed.

Keywords: epistemology; education; know thyself; metaphysics; master/slave

1. Introduction

This Special Edition of *Education Sciences* concerns the relation of epistemology and education. I want to explore this with a nuance: not so much as epistemology and education, but rather as the question of ways in which epistemology might be called educational and ways in which education might be called epistemological.

There is an idea in the Western tradition in which knowledge and education are brought together. This is the idea of know thyself, found in the temple at Delphi. Taken at face value, the object of the Delphic maxim here is the self. However, this takes for granted that the question of what it is ‘to know’ is already decided. As well as enquiring into the ‘self’, does not know thyself also require an enquiry into ‘know’?

The dangers of this kind of doubling, i.e., of knowing knowing, are well-rehearsed, and its apparent implications are no stranger to the tradition. The demand that the maxim know thyself should also know itself opens up the absurdity of infinite regression where this reflective self-enquiry is infinitely in search of a ground upon which its investigation can rest. If it is epistemology that is asked to know thyself, then its problem is clear. How can the theory of knowledge be asked to know knowledge without presupposing that knowledge already knows what it is? To seek to know knowledge is to have the answer in advance of the enquiry. It is from within this problem that I want to explore the relation between epistemology and education and to suggest that what it yields is a knowing of education and an education of knowing that changes both parties.

This may sound somewhat abstract and removed from the practice of education. In fact, as I hope to show, it is not at all removed from such practice, or from social and political relations more broadly. If a student of education, or indeed any student, asks why she/he should be concerned to bring the question of epistemology into her/his reading and thinking, there is an obvious answer. If epistemology, broadly speaking, is the theory of knowledge, then it is directly concerned with the work that any student performs. To 'do' education is to work with knowledge and for knowledge. Perhaps an epistemologist might say that no work is possible except through me, since all such work is dependent upon knowledge. If epistemology is the study of knowledge and if knowledge is the condition of the possibility of any education at all, then it is in this sense unequivocally the ground upon which all else is possible. However, even within the logic of this argument, I will endeavour to show not only the social and political significance of this relation of epistemology and education, but also how it can be part of the work of any programme that has education as its primary interest.

2. The Frailty of Knowledge

Consider for a moment an undergraduate student beginning a course of study at university. This student has every right to believe that her/his studying will be epistemological in two senses. It will require knowledge in order for her/him to make progress in her/his studies, and her/his hard work should in time yield knowledge that she/he may find valuable in any number of ways and not necessarily only in regard to future employment. However, recently, Tim Lott [1] reminded us that universities used to inculcate one truth in particular—how little one knows and how little can be known. He states, 'this profound negative no longer appears to be a stated function of higher education—understandably as it would be quite hard to sell' [1]. Instead, what universities sell now is 'the illusion of knowledge, the vocabulary of intellect' [1], whereas what universities should be offering is 'a clear door into doubt, not a leap into "knowledge"' [1]. He concludes, 'unless you understand that it [the university] is there to help you to frame questions, rather than to give you answers, the number of those disappointed with higher education is unlikely to fall in the near future' [1].

To the undergraduate then, perhaps one should offer some words of caution regarding expectations. There will be many a surprise in store, but perhaps none more alarming than the trials and tribulations associated with 'knowing'. To the new undergraduate, this may already be a familiar theme. Perhaps when the student joined university, she/he was told to forget what she/he had already learned in her/his schooling and prepare now to learn it properly, the way professional academics do it.

We might also draw attention to two more epistemological surprises for our undergraduate. The first is as dramatic as it is ubiquitous, and not just in the arts and humanities. The Western tradition used to work with the idea of true knowledge as timeless and unchangeable. The modern *zeitgeist* however is of knowledge as relative, contextual, changeable, paradigmatic and even undecidable. This is then broken down into social, cultural, political, scientific, philosophical and religious blocks, each deemed local to itself and not justified in enlarging itself into a single grand narrative of everything. One block might criticise universalistic aspirations as being, for example, paternalistic, or colonialist, or heterosexual, and so on. Each universalistic aspiration is exposed as harbouring vested interests that under-represent, or even oppress, others. However, this process of critique is not as straightforward as it might sometimes appear to be. For example, feminist critiques of patriarchal epistemology do not simply mean that the latter needs to open itself up to feminist epistemologies. It also means that feminist epistemologies can be criticised internally, for example, by women of colour or women from disadvantaged backgrounds, who see this version of feminist critique of patriarchy as too aligned with white middle class feminist values. This is well-known and is of course part of the continuing critical process. However, here once again, there is a process of *reductio ad absurdum* where every new critique becomes an epistemology, which excludes someone or some group, and is criticised for this, and so on.

Not too long ago, this whole outlook was captured within the sociology of knowledge. This argued that all knowledge was relative to context, as were all social norms, values and behaviour codes. However, this was not a new idea. Around the second century CE, Sextus Empiricus represented scepticism regarding any eternally unchangeable epistemological truth, claiming that ‘to every account an equal account is opposed’ [2] (p. 6). From this, sceptics believed that the only consistent standpoint was ‘to hold no beliefs’ [2] (p. 6), a view that for some, in more recent times, would drift into nihilism. The problem was summed up by Pascal in his observation that what can be ‘true on this side of the Pyrenees [can also be] false on the other’ [3] (p. 46).

Thinking of this slightly differently now, one might say that epistemology in the Western tradition began not with knowledge at all, but with the insight that Lott laments as lost to modern universities. Socrates in fifth century Athens BCE famously questioned every claim to knowledge made by those who lived around him and who espoused to know anything at all. In his pedagogical midwifery, he would listen to the knowledge claimed by others and then subject it to questions, revealing in most cases that this knowledge did not have stable foundations. He enjoyed watching others give birth to new doubts about old certainties under this questioning. His fate was to be condemned to death by those who felt that the only result of his questioning was doubt and uncertainty, exposing the frailty of knowledge and the frailty of those considered knowledgeable, an exercise that was not held to be a secure basis for ethical life in the ancient Greek polis.

This Socratic spirit of questioning knowledge and creating doubts was ever present in the development of Western civilization. Some railed against its inherent dangers; others earnestly supported its critical significance. Some saw it as an example of Plato’s view of enlightenment, that knowledge in the cave is illusory and needs to be overcome by the truth of philosophical work, whilst others saw it only as a disingenuous and destructive force against the need for society to have a secure basis of knowledge on which to ground itself.

Therefore, our new undergraduate finds herself/himself facing an epistemological crisis that perhaps her/his compulsory education had not prepared her/him for. She/he came expecting to gain knowledge, only to find that the very idea and identity of knowledge itself is contested. She/he might also find that the books she/he reads and the tutors she/he meets are more concerned with rehearsing the intricacies of this contestation than they are in trying to wrestle with the meaning that the frailty of knowledge has for those who live with it. She/he might find something quite intriguing about the way that critics of unchangeable and timeless epistemologies offer apologies for any remnant of timeless truth in their own work. She/he might see here a pattern repeating itself. Critics of knowledge solidify into the knowledge of critics, which in turn requires its own critics. This endless regression leaves the student perhaps bewildered, wondering what to do in a world where the best that epistemology can achieve is to claim that epistemology no longer falls under the illusion of timeless knowledge and now understands its own limitations and frailties. As Lott drew our attention to, is this epistemology really the kind of thing that students risk considerable debt to learn about: to learn that knowledge is always frail in its power, and is unstable, and is never timelessly true. Even the ancient vision of a university education leading to virtue and wisdom, as being relevant to deciding on good actions in the way one lives one’s life, falls prey to the relativism of this view of epistemology.

3. What If the Totality Is False?

Adorno has a very telling phrase that both captures and extends this educational dilemma. He speaks of society as a ‘totality that is false’ [4] (p. 28). Perhaps this describes the experience of our undergraduate. Not only does she/he come to see that every epistemology is partial, that every epistemology is also always a form of someone’s power and that there is only vested interest behind each partiality; she/he also realises that there is nowhere to go where one can gain a vantage point that can see the truth of the whole picture and offer a definitive epistemology in place of a relative epistemology. There is, she/he finds, no possibility of redemption from the relative, and as such, the whole of reality, everything, is false.

Our undergraduate will hopefully meet a variety of people who respond differently to this totality of false epistemologies. She/he might meet those who enjoy such a false totality, who relish the absence of timeless epistemology, who find in its relativity a culture of acceptance and tolerance of others, a non-dogmatic way of life and a pluralism that can defend against the tyranny of one epistemology by another. She/he might meet some who turn to religion and to truths that transcend the false epistemologies of the totality, seeing the totality as sin requiring redemption. This too has consequences for the way in which the life of such a person should be led. She/he may also find some rather more political responses: Marxists who struggle against class-based ideological epistemologies; feminists who struggle against patriarchal epistemologies; anti-racists who struggle against colonial and imperial epistemologies. Indeed, she/he might find such a variety of responses that it resembles something of a supermarket in which one browses the shelves of partial and local knowledges, choosing one bit from one shelf, and something else from another shelf, until the basket is full of isolated pieces, some of which may contradict each other, but which the student nevertheless claims as suiting her/his own tastes. The sociologist Max Weber wrote of this kind of higher education as one in which the warring gods compete with each other for truth and in which none are able to score a decisive victory. Hence, the student is left to make her/his own value claims from the array of epistemological conflicts, which are ubiquitous and unavoidable.

Amidst the warring gods of epistemologies, and within the totality that is false, I want to make three observations, each relevant specifically to the student and teacher of education. The first is how philosophy has tried to deal with this relativism of epistemology; the second looks at the question of power and the frailty of knowledge in social and political relations; while the third looks at how some have tried to bring the uncertainties of epistemology into education as an educational experience, including as know thyself. Together, these constitute my argument overall, that epistemology in education is one thing, but epistemology as education, and education as epistemology, is something very different.

4. Philosophy

Western philosophy is well acquainted with the challenges of epistemology. Socrates as we saw questioned the status of all knowledge by revealing the contingency of knowledge upon individual perception and experience, wherein the claims for universality could not withstand being actually or individually experienced. Depending on one's reading of Plato, he either preserved universal knowledge in the transcendental forms a priori, or he discovered a dialectical relation between the universal and the conditions of its possibility in being known to individual minds. Aristotle has a similar ambivalence. He is either the theorist of the status of universal knowledge in-itself, unchangeable and eternal, or he is the more empirical thinker who finds the true knowledge of anything in the actual individual forms that each piece of knowledge takes.

If one then jumps from Antiquity to the European Enlightenment, one finds Kant wrestling with the same problem. If, on the one hand, true knowledge was a priori, but, on the other hand, modern reason required that true knowledge be thought by the free individual, the famous 'think for yourself', how was this circle to be squared? How could true knowledge be beyond experience and yet in experience? Kant's Copernican revolution took seriously how the knowledge of universality is always knowledge experienced by, and therefore mediated by, the individual. Truth suddenly ceased to be a priori in the existing object and became a posteriori in the thinking and the experience of the individual. True knowledge was no longer to be found in the object in-itself, but in the experience of the object, or as the object being for-another. Kant saw clearly enough the danger of relativism here, but sought to avoid it by stating that it was reason itself, not the object, that had a transcendental a priori form, which the individual mind could know truth as a necessity, but never in-itself. True knowledge was possible, and necessary, but nevertheless unknowable.

Hegel took up the challenge that Kant bequeathed, of truth or universal knowledge being necessary but unknowable. He argued that it was merely a prejudice to assume that thought and

truth, or individual and universal (or subjectivity and substance) were incompatible with each other. Indeed, he asked how we could already know that truth and experience are incompatible if it is truth we are seeking. Did not the judgement of this incompatibility in fact presuppose that truth was indeed already known? If the uncertainty of epistemology were to be taken seriously, then one should also see as uncertain the pre-judgement that thought sits on one side and truth on the other. For Hegel, for very specific reasons, which we will not pursue here, it is in this epistemology of uncertainty that he finds a new definition of true knowledge [5].

In the continental tradition, philosophers have taken seriously the contingency of truth upon its conditions of possibility, those conditions being, for example, subjectivity (Descartes), communication/intersubjectivity (Habermas), patriarchal relations (feminism), being (existentialists), Being (Heidegger), humanity at large (humanists), power/knowledge (Foucault) or text (Derrida). However, as noted above, such approaches may be fated to become epistemologies in their own right and need to be critiqued lest they mistake their interventions against universality for interventions that repeat that same universality.

5. Knowledge, Logic and Social Relations

Another way in which to think about the nature of epistemology and its universalistic claims to true knowledge brings us close to one of the key themes of the Special Edition of *Education Sciences*, namely to explore the links between theories of knowledge (epistemologies) and the realm of practice, or ethics, or individual action taken in the social arena.

As mentioned above, one reading of Aristotle is that he defined truth and true knowledge as that which was in-itself, unchangeable and timeless. It stood independent of any influence and any contingency. The in-itself was perfect knowledge; everything else was imperfect by comparison. What is intriguing here is that the definition of true knowledge, of universal epistemology, mirrored exactly that of the ancient definition of the free man, or master. This free man was free because he was his own master, slave to no one, independent in his existence and uncompromised by anything outside his own identity. True knowledge in-itself and human freedom were one and the same mastery of identity. This might suggest that truth was defined by the master in his own image, so that everything that was not independent in-itself was either an epistemological error or, the same, a political slave. That which was untrue was characterised by dependence on that which was true, both as the dependence of epistemology upon the prime mover, the *great master*, and the dependence of slaves upon their owners' freedom and will.

Rousseau's speculations on the origins of inequality are equally instructive. He reasoned that the social and political mastery of one over another lay not in human nature, but in a series of developments in which it gradually became clear that those who had most goods and status would enjoy life more than those who had less. The key to this was that the masters cemented their power under the illusion of the equality of private property. As a protection of everyone's property, all accepted the principle of private property, and all ran headlong into their chains, as Rousseau put it. At one stroke, this also institutionalised existing inequalities. Those with the most now legally kept what they had, those with the least now also legally kept what little they had. Both were 'equally' protected under the universal law of private property. Here, again, there is a story of epistemology. Truth within private property was truth from the master's point of view. It was not a 'neutral' universality, but rather a universality cast in the interests of the masters. One could trace a whole range of values that accompany this epistemology of mastery, not least the work ethic, the structure of the global economic market and the institutional safeguarding of privilege around race, gender, culture, class, etc. It also highlights the politically-loaded nature of ideas like equality, for one can be formally equal under the law and actually unequal under the same law because of its political bias towards the masters and against the slaves.

Behind the ambivalence of these modern political epistemologies lies an even more remarkable idea. Theories of knowledge are not just reflections of social mastery and philosophical mastery.

Both of these masteries rest upon something else, something that passes unnoticed because of its absolute visibility, its absolutely taken-for-granted status in the Western tradition. Epistemology, or the enquiry into true knowledge, works according to a common sense notion of logic. This logic is also not 'neutral'. Instead, logic means mastery. For example, how do we know when people are being logical? It is when they have managed to triumph over the illogical. What is illogic? It is that which is not a truth in-itself, or is not its own master and can be reduced to a more simple form. Even logic, wallowing in its reputation and status as being neutral and even-handed, is grounded in and reproductive of the definition of mastery. Contradictions and inconsistencies are slaves in the realm of logic. They are unable to ground themselves as they have no end in-themselves. They are not able to be first principles, which means they have no mastery of their own. To be logical, therefore, is to master contradictions and inconsistencies.

The one term that captures this philosophical, political and logical mastery is overcoming. One claims epistemological truth, political truth and logical truth when one overcomes claims to truth that fail to ground themselves. As the in-itself overcomes that which is only for-another, as the master overcomes the errors that are slaves, and as logic overcomes contradictions, so knowledge, politics and logic are all sustained as true by overcoming anything and everything that is not its own master.

Education is not immune from this same totality of overcoming. Education overcomes ignorance. As part of this process, teachers are masters of education, for they have epistemological mastery of the content and values that are taught to others. They have education as political mastery, for the students are entirely dependent on their teachers. Students cannot announce themselves masters of their own education; they cannot issue themselves examination or degree certificates. They are dependent on those who enjoy mastery of what counts as an educational qualification. Teachers also have logical mastery. What counts as being legitimately 'an education' is part of the epistemology of mastery. To understand something is to have overcome an error of misunderstanding; to have successfully explained something is to have overcome ignorance; to have successfully learned something is to have overcome or mastered one knowledge with another. Each of the key tools of education that a teacher employs are defined within the logic of mastery and contribute to activities of education as activities of overcoming. Here, the epistemology of mastery underpins the all-too-easily accepted definition of what counts as education. The question we can now ask is, is there a different way in which epistemology and education can be 'understood'?

6. Knowing What Knowing Is

Another strange aspect of the challenge to epistemology that it should seek to know thyself is that the problem it heralds can be seen as the question of 'how to begin?' For example, how could epistemology begin to know itself when a beginning was already presupposed by the 'know' of know thyself? This aporia of the beginning of knowing, or of epistemology, or of philosophy, has not gone unnoticed in the Western tradition. Plato and Aristotle both saw the danger of infinite regression, that in order to know anything, we first need to know how we know how we know how we know... Both could be read as having found a way of overcoming this problem, by means of a divinity, a self-mover in Plato [6] and a prime mover in Aristotle [7], which was knowing in-itself, or which knows itself as the one who is knowing itself. By comparison, when human beings also tried to know themselves as the ones who were knowing themselves, they failed to achieve the unity of this prime mover. While the human intellect could only know itself as a relation of knower and object (or individual experience and truth), the prime mover was both of these without any separation.

Hegel and Kierkegaard also took up the epistemological challenge of how to begin an enquiry into knowledge without presupposing a knowledge of knowledge beforehand. Hegel treats this in the *Science of Logic* with the question 'With what must philosophy begin?' It cannot begin with knowledge as mastery or as in-itself, when precisely such a definition is what is being sought. Therefore, with what does philosophy begin? His answer is that it begins with presupposition. The presupposition is not

just in being part of the question of beginning, it is the question. The question presupposes that it knows how to ask the question about knowledge. The question already betrays a knowledge of knowledge. Kant, as we saw, explained the necessity of such a presupposition as the schema of a priori reason. However, Hegel interpreted the presupposition differently, seeing it as the only way in which one can know or understand the beginning, or seeing it as the condition of the possibility of all epistemological investigations. However, what does it mean to say that the presupposition of knowledge is the beginning of knowledge?

Kierkegaard is also in earnest regarding this same question. Like Socrates, he took seriously the idea that epistemology really meant that everything must be doubted, or that epistemology must begin with uncertainty, with doubt, and with a level of scepticism, and this because of the dialectical problems that the thinking of truth created in and for the individual mind. However, here too he found presupposition. Why accept that we already know that everything must be doubted? Why not also doubt this? Additionally, if this is also doubted, then what is left, again, is only the presupposition that the question can be asked, and that knowledge is first known in the presupposition of being able to question it. It would seem that when knowledge knows itself in the form of questioning itself, this is the only beginning available to it.

Clearly, this is not a beginning in any ordinary sense of the term. There is no clear moment that one can point to, a moment that distinguishes the beginning of knowing from what came before it, that is, ignorance. Such a moment also eluded Plato's and Aristotle's theories of the first beginning or creation. In the *Timaeus*, a demiurge finds already-existing matter, and in *Metaphysics*, the prime mover is eternal, having no moment of beginning or end. This caused the monotheistic faiths a great deal of trouble in trying to reconcile Neoplatonism with a moment of creation by God. More recently, the Big Bang theory runs into the same problem of having to explain how something comes from nothing, or to try to explain what existed before the Big Bang. Each of these attempts to know the beginning ran into logical problems, or logical aporias, but few have attempted to understand them as presuppositions, preferring the logic of mastery in trying to overcome them.

7. Epistemology: Know Thyself

As the theory of knowledge, epistemology stands guard at the entrance to knowledge and acts as the authority over uses and abuses of knowledge. However, in having no secure beginning or foundation, it faces its own crisis of legitimacy, authority and identity. Perhaps one might say that the issue at stake here can be stated very simply, even though the implications are profound and far-reaching. How is epistemology to know itself? The theme of know thyself has accompanied the Western tradition from ancient Greece to modern times. At the temple at Delphi, it was recorded along with two other maxims: nothing in excess and promises lead to trouble. It was taken up by Jewish, Christian and Islamic writers and thinkers and survives today in different forms ([8,9]).

Less common is work that takes up the epistemological and educational challenge by which epistemology should learn to know thyself. I want to suggest a way of doing so now, by combining the insights offered above. In summary, the idea of knowledge, or epistemology, as mastery, creates its own problems. Mastery can no more master itself without seriously undermining itself than knowledge can know itself without creating contradictions. If the logic of mastery is part of this problem, where might one turn in order to find a different kind of logic? If the problem of epistemology knowing itself comes down to the impossibility of defining for itself a beginning and therein of grounding itself as a first principle, how can epistemology be rethought or reconceived within the dilemma, rather than in the interminable repetition of the impossibility of its logically resolving the dilemma?

Kierkegaard once observed that in seeking to know truth, philosophy 'walked around like a man who is wearing his glasses and nevertheless looking for his glasses—that is, he is looking for something right in front of his nose, but does not look right in front of his nose, and therefore never finds them' [10] (1989, p. 272). Perhaps the same can be said of epistemology. If it gets stuck in trying to understand itself because of the logical issues it repeats, but nevertheless still seeks to understand

itself without knowing of how to deal with such repetition, perhaps this illusive understanding is much nearer to hand than it might imagine, perhaps under its very nose. If presupposition is the only thing we can know in seeking to know anything at all, then why rule out presupposition as truth? To do so is only to import a presupposition of truth in order to master the unaccountable ubiquity of presupposition. Perhaps we would do better to ask what kind of experience is it that we have when we experience beginning, or authority, or mastery, as presupposition? Is it not an educational experience? Is it not an experience in which knowledge is learning of itself as presupposition, and in doing so, learning of itself in the experience of the collapse of mastery and the collapse of its logic. Bluntly, is this learning not the experience of the inadequacy of the idea of overcoming? Has epistemology had a theory of knowledge under its very nose all the while it has been seeking one?

8. Beginning Education

If, for a moment at least, we suspend our disbelief that truth could be presupposition, and that the experience of the loss of mastery is an educational experience, then one is able to ask how this education about the aporetic beginning and grounding of epistemology might look in practice. What might it look like for our new undergraduate, or for anyone beginning a new educational programme? How might this education be taken seriously and be able to form part of an education degree, or indeed any programme of studies that seeks to make 'learning' an object of enquiry on the programme? One way of thinking about this is to ask how the presupposition of knowledge can be made part of the epistemology of a course of study, or to put it another way, how might one teach for the experience of knowledge: know thyself?

This question is really the question 'with what must education begin?' and 'with what knowledge must knowledge about education begin?' There is a resource that we use for a degree at the University of Winchester, UK, that tries to answer this question. It tries to answer it not with mastery, not with overcoming the anxiety of the beginning, but with the experience of vulnerability, which throws the whole notion of an 'answer' into confusion. It tries to work with the notion of beginning not exclusively within the logic of mastery, but also within; let us call it a logic of educational experience. As such, it acts as an introduction to learning, by putting the question of learning at the beginning, and doing so in the experience that a simple beginning of education, on any programme, but especially one on education, is far from simple.

The material we use is from Donald Schön and appears in his book *Educating the Reflective Practitioner*. At one stage, Schön describes the dilemmas associated with a design student beginning her/his course of studies. Referring back to reservations expressed by Carl Rogers that if his teaching were too successful, it damaged the learning of the student by making things too clear, Schön writes about the difficulties that must accompany this loss of simplicity.

He lists three such difficulties. The first, from Plato's *Meno*, is that students cannot know ahead of time the knowledge for which they are to search. How, then, can they look for what is unknown, and how would they know it even if they came across it? Given this, how could the students ever make a beginning at all? The second is that the tutor cannot simply begin the programme with such knowledge. It would simply not make sense to the students to be given this knowledge at the beginning. Therefore, what is to be understood in the programme can neither be taught nor learned at the beginning. Given this, how can a teacher or student make a beginning at all? Third, Schön employs Coleridge's phrase 'willing suspension of disbelief' to describe the action that is appropriate to this dilemma of beginning education. Speaking of reading poetry, Coleridge says the reader needs to suspend disbelief in things in the poem that are incomprehensible, or even absurd, and, in Schön's words, to 'commit to the enterprise that yields the experience' [11] (1987, p. 94). This advice applies to any beginning, for what has begun cannot be known until it has played itself out. At this point, Schön's description of what this means for the design student applies to the beginning of any programme of study or indeed to any beginning at all. It is for all intents and purposes a practical philosophy of making a beginning. In this risk of beginning the student 'must temporarily abandon

much that he already values ... He becomes dependent on his instructors. He must look to them for help in acquiring understanding, direction, and competence. As he willingly suspends disbelief, he also suspends autonomy—as though he were becoming a child again' [11] (1987, p. 95).

This is a practical epistemology, knowing only that the beginning of knowing begins, as T.S. Eliot would say, in the place of not-knowing. This negative epistemology resonates with Lott's comments on the profound negation that is missing in higher education at the present.

9. Educational Epistemology

What does it offer us to take seriously the idea that epistemology, when operating with the logic of mastery and overcoming, can only negate aporias regarding its own activity? Similarly, what does it offer us to find that epistemology in fact repeats a different kind of logic, a logic of presupposition? There are three insights we might conclude from learning of this journey of epistemology's self-discovery.

The first is that logic without the aporia of epistemological presupposition is only a logic of mastery and overcoming, while the logic of presupposition is self-educating. This is the epistemological logic of the Delphic maxim 'know thyself' and it is a logic not of mastery, but of education. This logic of education challenges the logic of mastery, wherever it appears, to be open to its own contradictions and to the infinite regression of the mastery of mastery of mastery... In such openness it will also be open to learning that the logic of mastery is in fact grounded in presupposition, and that the logic of this presupposition changes the very meaning of an idea like 'grounded', or 'first cause', or 'origin', or 'beginning'. This 'change' is its own logic, a logic of learning and of education, and is already present in presupposition that comes to know itself as presupposition.

This logic of education offers a second equally dramatic significance. It challenges mastery wherever and whenever it appears within the instability of mastery and overcoming. It gives meaning to the continual failure of mastery to be stable, or secure, or self-sufficient. Mastery is never free. It is not free because it cannot ground itself, and it is not free because in failing to ground itself, it always supports itself by exploiting the lives and work of others. The slave is necessary precisely because the master is not free, not able to ground itself. As such, the logic of education bears witness to the exploitation of slavery wherever it exposes the inadequacies and sometimes the hypocrisies of the master.

As such, and third, a logic of educational epistemology has significance in any cultural area or practice where power relations appear between master and slave. This logic of education awaits its retrieval, for example, in ways of thinking about and understanding master/slave relations within gender, within race, within culture, within sexual identity, within colonialism and imperialism and within the teacher/student relation, the priest/parishioner relation, as well as between any 'professional' and 'client', owner and tenant, boss and worker, manager and managed, institution and individual and system and human being. In each such example, the logic of education waits to give meaning to the vulnerability of the master's need to exploit the slave.

However, what kind of 'meaning' does educational epistemology offer? What does it benefit the slave in each relation to know of the master's epistemological insecurities? First, to see things through the master's epistemological claims of self-sufficiency is to see this through the illusion of a merely bourgeois notion of independence and freedom. This is a political education in its own right. From it, and second, the slave can rethink its own identity in relation to the now incomplete master. This has happened many times, wherever the slave has revolted against its exploitation and in the realisation that such exploitation is carried on and justified only in the illusion of the master's authority.

However, a difficulty is raised here even in each revolt. The slave has learned of the master's empty claims. If this learning is now turned into its own logic of mastery, then the logic of the education is crushed beneath a new mastery, a mastery that seeks to overcome the old master, with a view to establishing a new mastery. Political theorists have struggled to legitimate this new mastery, for example, as a dictatorship of the proletariat, seeking to claim that this is a different kind of mastery.

However, such claims are exactly the kind of epistemological presupposition that mastery has always stood on. The danger is that this only changes the faces at the top table, who then embrace for themselves an even more tyrannical mastery.

What happens then if the slave tries to remain true to the logic of education that has been its own self-determination, and not to succumb to the powerful temptation to become the new lord of overcoming? Can this slave live in and as an educational logic? Can education become its own way of life, a way of life that lives with the ever-present threat of new mastery, but which struggles always to let the logic of education speak and expose the illusion of such mastery? Can one live in such an education? Perhaps we do not know whether we can or not. However, we can say that to live the logic of education within a world dominated by the logic of mastery is to live a life wherein many taken-for-granted meanings, each central to life lived in the logic of mastery, are re-formed, and understood not masterfully, but educationally. Truth, explanation, understanding, indeed anything to do with knowledge and with knowing, change their meaning from mastery to learning. If one asks what such a life of learning looks like, then we have already seen it in the way in which the beginning of education can be taught not as something to be overcome, but as something to be continually learned, or as the culture of a programme of studies.

In short, either epistemology can be a barrier to justice, remaining a tool of the masters, shaped in their own image and serving their own interests, or epistemology can become the key to unlocking exploitative relationships in arenas of power, of masters and slaves, becoming a way of life of those opposing mastery, but without simply overcoming mastery as the new masters. This epistemology is not just epistemology and education; it is educational epistemology, and it is epistemological education, and both together, in the logic of education, are epistemology: know thyself.

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